Executive Summary
Physics and Astronomy Collection Assessment
Submitted by Paula Barnett-Ellis
November 12, 2018

INTRODUCTION

The Physics and Astronomy collection is central to the University curriculum as the minor in Physics complements and supports study in other disciplines, such as the sciences, mathematics, and computer and information science. The collection is adequate to support the minor in Physics offered by JSU, including Astronomy and related courses. Complete conspectus sheets and checklists are available upon request for a more detailed examination of the collection.

HOLDINGS

The Physics and Astronomy collection contains **7,378** titles in the QB 1-991 and QC 1-999 call number ranges, including **412** e-books. Total monograph expenditures for Physics and Astronomy from FY 2013/14 TO FY 2017/18 were **$13,371.77** with **319** new titles added. These newer additions comprise 4**%** of the current Physics and Astronomy collection.

These numbers represent a snapshot of the collection, as titles are continually being added and withdrawn for collection maintenance and growth. These numbers do not represent additional titles available through e-book databases.

Classification	Subject Area	Library Holdings
QB 1-991	Astronomy	2,070
QC 1-999	Physics	5,308
Total		**7,378**

Monograph Expenditures for Physics and Astronomy	
Fiscal Year	**Amount**
2013/14	$2,284.56
2014/15	$3,196.41
2015/16	$1,968.04
2016/17	$3,301.12
2017/18	$2,621.64
Total	**$13,371.77**

PERIODICALS AND SERIALS

The Library has access to full-text journals available throughout the Library databases. There are around 121 journals in Astronomy and related subjects and 321 journals in Physics subjects available electronically through database subscriptions, which can be found in EBSCO's Publication Finder at http://bit.ly/2zO6DjD. The Serials expenditures in Physics and Astronomy for both print and electronic subscriptions and standing orders average **$4,458.89** from FY 2013/14 to FY 2017/18 (see table below.)

Serial Expenditures for Physics and Astronomy	
Fiscal Year	**Amount**
2013/14	$3,919.33
2014/15	$4,611.44
2015/16	$4,642.06
2016/17	$4,662.72
2017/18	N/A*
Total	**$17,835.55**

*Expenditures not complete for this FY

Expenditures for serials have migrated away from the individual subscription model to the aggregator database model. Dollar amounts spent on aggregator databases cannot be sub-divided into subject categories. In 2016/17, aggregator databases totaled **$270,656.89**, which came from the general fund.

DEFINED ACCESS TO ELECTRONIC RESOURCES

Defined access points users to resources through menu options on the Library's homepage by linking the user to quality, highly relevant, electronic resources. Because the Library provides access to electronic journals, documents, e-books, and video databases along with integrated quality websites that encompass the area of Physics and Astronomy, the Library's electronic collection in this subject is adequate to support the curriculum.

A complete list of all of the Library's databases can be found in the A to Z Database Listing at http://libguides.jsu.edu/az.php. The A to Z List also subdivides databases by subject, providing a list of all Astronomy related databases at http://libguides.jsu.edu/az.php?s=26288 and Physics related databases at http://libguides.jsu.edu/az.php?s=26276. Additionally, the Physics and Astronomy guide (http://libguides.jsu.edu/physics), which is maintained by the subject specialist, provides a list of and access to the resources specifically for this subject.

Complete details are available in the full assessment, which is available upon request or at http://bit.ly/2fyeMMU.

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SUPPLEMENTAL SUPPORT

Physics and Astronomy subject areas also extend beyond the boundaries of the disciplines. Holdings in the related subject collections of Biology, Chemistry, Geography and Anthropology, Geology, Engineering, Technology, and Medicine provide additional support to the collection.

TITLES ADDED/TITLES PUBLISHED

Below is a comparison of the number of book titles added to the Houston Cole Library collection versus those made available for sale each fiscal year through GOBI.

Monographs Added Versus Published Comparison			
Fiscal Year	**Added to Physics/ Astronomy Fund Code**	**GOBI New Titles Report[1] QB &QC**	**Percentage**
2013/14	68	1,035	7%
2014/15	61	1,028	6%
2015/16	52	1,024	5%
2016/17	79	1,018	8%
2017/18	59	1,050	6%
Total	**319**	**5,155**	**6%**

CHECKLIST SUMMARIES

Bibliographies including *Choice's* Outstanding Academic Titles (OATs) and *Resources for College Libraries* were used to measure the quality of the Library's collection. In checking the bibliographies against the Library's catalog, the following percentages were revealed in the subject area of Physics and Astronomy. See the Technology Collection Assessment for details on the TP classification.

***Choice's* Outstanding Academic Titles 2012-2017: Astronautics & Astronomy**			
Year	**Collected**	**Listed**	**Percent Held**
2017	3	8	38%
2016	4	4	100%
2015	6	6	100%
2014	3	5	60%
2013	3	4	75%
TOTAL	**19**	**27**	**70%**

[1] GOBI New Titles Report (https://www.gobi3.com/StaticContent/GOBIContent/YBP/Private/Help/Pages/newtitlereport_us.html)

Choice's Outstanding Academic Titles 2013-2017: Physics			
Year	**Collected**	**Listed**	**Percent Held**
2017	5	6	83%
2016	3	3	100%
2015	4	4	100%
2014	8	9	89%
2013	7	7	100%
TOTAL	**27**	**29**	**93%**

Resources for College Libraries 2013-2018			
Subject	**Collected**	**Listed**	**Percentage Held**
Physics and Astronomy	43	92	47%
Total	**43**	**92**	**47%**

WITHDRAWALS

As currency of information is very important in the Physics and Astronomy collection, older books are withdrawn on a regular basis or as newer editions supersede them, and new books are ordered to fill gaps as curriculum requirements change. The table below shows withdrawals from the QB and QC classifications.

Fiscal Year	QB and QC Titles Withdrawn
2017/18	18
2016/17	194
2015/16	7
2014/15	119
2013/14	10
2012/13	1
Total	**349**

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The following indexes and bibliographies were checked against the Library's holdings for serial titles pertaining to Physics and Astronomy revealing the corresponding percentages:

Titles	Collected	Listed	Percent Held
Magazines for Libraries 23rd Edition 2015: Astronomy	40	59	68%
Magazines for Libraries 23rd Edition 2015: Atmospheric Sciences	36	41	88%
Magazines for Libraries 23rd Edition 2015: Physics	63	78	81%
Total	**139**	**178**	**78%**

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Through partnerships, such as the one with the Alabama Virtual Library (AVL), the Library is able to obtain more content. Resources provided to the Library by the AVL are designated with the AVL icon.

SUMMARY

Strengths:

Total holdings, conspectus evaluation, and checklist comparisons indicate the overall Physics and Astronomy collection is more than adequate to support the curriculum. Of note on the conspectus worksheet are the holdings in the subject areas of: History, Biography; Planetary Studies, Galaxies, Quasars; and Constitution and Properties of Matter.

Weaknesses:

Total holdings, conspectus evaluations, and checklist comparisons indicate that some of the weakest areas of the Physics and Astronomy subject areas are: Semiconductors. Geodesy, and Geomagnetism.

Recommendations:

The growth rate of the Physics and Astronomy Collection should be maintained in order to continue providing support for the undergraduate and graduate programs in Physics and Astronomy. The monograph collection should be generally increased, based on budget, with a strong focus on core and outstanding titles. The periodical collection available via databases is substantial and should be maintained. The weak subject areas (noted above) should also be addressed in future additions to the collection. The Library must maintain subscriptions and online periodical databases that cover Physics and Astronomy and related subject areas to keep access at current levels.